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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,564	02/25/2002	Tetsu Takahashi	2163.1001	8623
21171	7590	03/17/2010		
STAAS & HALSEY LLP			EXAMINER	
SUITE 700			HASAN, SYED Y	
1201 NEW YORK AVENUE, N.W.				
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			2621	
			MAIL DATE	DELIVERY MODE
			03/17/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	10/080,564	TAKAHASHI, TETSU
	Examiner	Art Unit
	SYED Y. HASAN	2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 31 July 2009.
- The allowed claim(s) is/are 1 - 3, 5 - 14 and 16 - 22 (renumbered 1 - 20).
- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - All
  - Some\*
  - None
 of the:
  - Certified copies of the priority documents have been received.
  - Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 \* Certified copies not received: \_\_\_\_\_.
- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
 Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- Notice of References Cited (PTO-892)
- Notice of Draftsperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
- Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- Notice of Informal Patent Application
- Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
- Examiner's Amendment/Comment
- Examiner's Statement of Reasons for Allowance
- Other \_\_\_\_\_.

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621

**DETAILED ACTION**

**Examiners Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given via a memo received from Luminita A Todor on 10/26/2009 in an email.

The application has been amended as follows:

Replace previous claim 17 with the following:

17. A semiconductor device, comprising:

a coding/decoding circuit performing coding and decoding a given signal in one of a plurality of coding/decoding modes of different bit rates, the plurality of coding/decoding modes including a first mode in which the given signal is recorded/reproduced on a recording medium, and a second mode in which the given signal is not recorded/reproduced on the recording medium but is output; and

a control circuit automatically setting a first bit rate corresponding to the first mode according to a remaining storage capacity A (bytes) of the recording medium, wherein said control circuit lowers the first bit rate when the remaining storage capacity A is less than a predetermined value, and a second bit rate of the second mode is equal to or larger than the first bit rate

***Allowable Subject Matter***

2. Claims 1 – 3, 5 – 14 and 16 – 22 (renumbered 1 – 20) are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

Independent claim 1 identifies the unique distinct feature "wherein the predetermined bit rate is equal to or larger than a bit rate determined by the control part based on a remaining capacity of the recording medium in the first mode".

The closest prior art, Inoue et al (US 5504759) discloses a coding/decoding part performing coding and decoding a given signal (fig 5 and 7) in one of a plurality of coding/decoding modes of different bit rates (fig 10, col 15, line 65 to col 16, line 12) but does not disclose wherein the predetermined bit rate is equal to or larger than a bit rate determined by the control part based on a remaining capacity of the recording medium in the first mode

Hence claim 1 is allowed.

Since claims 2 and 3 are dependent on claim 1, therefore they are also allowed.

Therefore claims 1 – 3 are allowed over prior art.

Independent claims 5 and 16 identify the unique distinct feature "wherein: the control circuit sets the bit rate further depending on a time T (seconds) of recording reserved, a maximum available recording bit rate Rmax (bps), and a minimum available recording bit rate Rmin (bps), and said control circuit determines the bit rate R (bps) by which the recording is performed to satisfy the following formula:

$T \times R/8$  (less than or equal to) A

wherein,  $R = R_{max}$  when  $R > R_{max}$ ; and  $R = R_{min}$  when  $R < R_{min}$ ."

Independent claims 6 and 17 identify the unique distinct feature "a control circuit automatically setting a first bit rate corresponding to the first mode according to a remaining storage capacity A (bytes) of the recording medium, wherein said control circuit lowers the first bit rate when the remaining storage capacity A is less than a

predetermined value, and a second bit rate of the second mode is equal to or larger than the first bit rate.

Independent claims 7 and 18 identify the unique distinct feature "wherein: the control circuit sets the bit rate further depending on a time T (seconds) of recording reserved, a maximum available recording bit rate Rmax (bps), and said control circuit determines the bit rate R (bps) by which the recording is performed to satisfy the following formula:

$T \times R/8 \text{ (less than or equal to) } A$   
wherein,  $R = R_{\min}$  when  $R < R_{\min}$ .

Independent claims 8, 12 and 19 identify the unique distinct feature "wherein a bit rate of the second mode is equal to or larger than a bit rate determined by the control part based on a remaining capacity of the recording medium in the first mode".

Hence claims 8, 12 and 19 are allowed.

Since claims 9 - 11 are dependent on claim 8, claims 13 and 14 are dependent on claim 12 and claims 20 - 22 are dependent on claim 19, therefore they are also allowed.

Therefore claims 8 – 11, 12 - 14 and 19 - 22 are allowed.

Hence claims 1 – 3, 5 – 14 and 16 – 22 are allowed over prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED Y. HASAN whose telephone number is (571)270-1082. The examiner can normally be reached on 9/8/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Y. H. /  
10/22/2009

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621